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## (54) PRODUCTION OF 1,1,1,3,3-PENTAFLUOROPROPANE

(57) Abstract:

PURPOSE: To obtain 1,1,1,3,3-pentafluoropropane which is useful as a foaming agent or as a refrigerant for turbo refrigerator by fluorinating 1,1,1,3,3- pentachloropropane in the presence of an antimony catalyst.

CONSTITUTION: The liquid-phase fluorination of 1,1,1,3,3-pentachloropropane is carried out using hydrogen fluoride in the presence of an antimony catalyst such as antimony pentachloride at 10-150°C under a pressure of 1-100kg/cm2. It is preferred that the catalyst concentration is 0.1-50 mole % based on 1,1,1,3,3- pentachloropropane and the molar ratio of hydrogen fluoride is in the range from 5 to 30. This fluoride compound can be obtained from the corresponding organic chloride through the one-step operation.



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